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American School  
of Classical Studies  
at Athens

THE EAST STOA IN THE ASCLEPIEUM AT  
ATHENS<sup>1</sup>

[PLATES I-V]

THE sanctuary of Asclepius, on the south slope of the Acropolis at Athens, was excavated in 1876 by the Greek Archaeological Society, and the remains of buildings found in it have been made known by brief descriptions and by the publication of several plans of the site.<sup>2</sup> Until recently, however, no reconstruction of any of the buildings had been published. The following discussion of the East Stoa is based on a study of the remains made in 1905-06. Since then the site has been investigated anew by Mr. F. Versakes, who has published restorations of the buildings in the *Ἐφημερίς Ἀρχαιολογική*, 1908, pp. 255-284, pls. IX, X. A detailed criticism of

<sup>1</sup> This article presents a part of the work of Mr. Allen in 1905-06 as Fellow in Architecture of the American School of Classical Studies at Athens on the grant of the Carnegie Institution of Washington. He was assisted in the study of the Asclepieum by Mr. Caskey, then Secretary of the School, who has also collaborated with him in the preparation of the text. — ED.

Permission to study the Asclepieum and to make such small excavations as were necessary to clear up the plans of the buildings was obtained from Professor Kabbadias, Ephor General of Antiquities. Two workmen were furnished by the Greek authorities, through the kindness of Mr. Soteriades, Ephor of Antiquities, who, together with Professor Bates, then Acting Director of the School, was present during the digging. The thanks of the writers are also due to Professor Dörpfeld for advice and for examining the site with Mr. Allen, and to Dr. Washburn, then Fellow of the School, for much assistance in taking the measurements for the plans.

<sup>2</sup> The fullest description is that of Koehler, *Ath. Mitt.* II, 1877, pp. 171 ff., and especially pp. 229 ff. The most complete plans are those of Mitsakes, *Πρακτικά*, 1877; Lambert, *B.C.H.* I, 1877, Pls. 7, 8 (reproduced in Girard, *l'Asclépieion d'Athènes*); Middleton, *Plans and Drawings of Athenian Buildings*, Pls. 18, 19. Cf. also Frazer, *Pausanias*, vol. II, pp. 234 ff., Judeich, *Topographie von Athen*, p. 285, and note 13 (a full bibliography), and D'Ooge, *The Acropolis of Athens*, pp. 250 ff.

this article will not be given here.<sup>1</sup> Most of the buildings seem to the present writers too thoroughly destroyed to admit of a complete restoration. The East Stoa, however, can be restored in almost every important feature on the direct evidence of the remains,—evidence which has in part been overlooked or misunderstood by Mr. Versakes. In view of the importance of the building, both in its bearing on the cult of Asclepius and as an architectural monument, the publication of the accompanying drawings, which differ considerably from those of Versakes, seems justified.

#### DESCRIPTION OF THE REMAINS

As is shown on PLATE I,<sup>2</sup> the Stoa occupied the northern half of the eastern, or lower, of the two terraces included in the precinct of Asclepius. It is bounded on the east by the Acropolis rock and the great supporting wall of the Dionysiac theatre; on the north the rock is cut away vertically as a backing for the rear wall of the Stoa. The plan of the building in its present state is shown on a larger scale on PLATE II. Its length is 49.965 m., its width 9.75 m., measuring from the front edge of the stylobate to the face of the rear wall. At the west end the rear wall is set back 4.30 m. to form a chamber about 9.65 m. square. The level of this chamber is about 4.45 m. above that of the stylobate.<sup>3</sup> In its centre is a circular pit, 2.60 m. in diameter and 2.20 m. deep, lined with polygonal masonry of Acropolis limestone, and around the pit, resting on a foundation of conglomerate, four low cylindrical bases of Hymettus marble (diameter 0.87 m.) are still *in situ*. About 15 m. from the east end of the Stoa is an entrance through the rear wall to a circular vaulted chamber hewn in the rock (diameter, 5.00 m.; height, 4.10 m.), in which is the sacred spring. Between this cave and the square chamber are

<sup>1</sup> Some of its shortcomings have been pointed out by Professor Dörpfeld, *Ath. Mitt.* XXXVI, 1911, p. 70.


<sup>2</sup> Some unimportant late ruins shown on Lambert's plan have here been omitted. Others have disappeared since that plan was made. The plan contains some details (*e.g.* the water-channel back of the West Stoa) which are not indicated on the earlier plans.

<sup>3</sup> This chamber, which was clearly an integral part of the building, is left completely out of account by Versakes.

the remains of a Byzantine building, consisting of two lines of wall, which have supported a vault. These walls, which are still standing to a considerable height, are indicated by cross-hatching on the plan.

In the interior of the building the following foundations are to be noted: Three small, square foundations, each composed of two blocks of conglomerate, are *in situ* in line with the long axis of the building opposite the second, fourth, and sixth columns of the façade. They mark the positions of the interior columns. These were not set directly upon the foundations, but upon intermediate square blocks of Hymettus marble, the top of which was at the level of the stylobate. Two of these blocks are preserved, and show two dowel holes in their upper surface, with pcur-channels, by means of which the diameter of the (presumably) Ionic column bases can be calculated as about 0.85 m. The foundations for the remaining three interior columns are hidden under the front wall of the Byzantine building.

At the east end of the Stoa a foundation wall of *poros*, 0.66 m. wide and distant 1.70 m. from the end wall, runs back at right angles to the stylobate. In the space thus cut off, it is reasonable to restore (with Koehler) a staircase to the second story, though evidence of such a staircase is lacking.

A second foundation wall, of conglomerate, 1.07 m. to 1.20 m. wide, runs across the Stoa, back of the fifth column from the west end. Upon it, adjoining the stylobate, are two blocks of Hymettus marble *in situ*, the one to the west still fastened to the adjacent stylobate block by a  clamp. Three blocks of the same width and workmanship are now set at right angles to the first, running toward the west. That these are not in their original position is shown by the clamp-cuttings, which do not correspond. These blocks evidently once continued the line of the first block northward.<sup>1</sup> There are several reasons in favor of restoring a staircase here. (1) It is probable that the square chamber was reached from the interior of the stoa, for there would have been no reason for including the chamber in the building unless there were such a means of communica-

<sup>1</sup> Versakes, failing to notice this, uses the three blocks to restore a narrow staircase running west and then north to the second story.

tion. (2) The first five intercolumniations from the west end were closed by a wall, and the original ground level back of them, which is preserved, is higher than the stylobate. This space was thus naturally adapted to such a use. (3) The stylobate block immediately east of the fifth column and the eastern of the two blocks *in situ* back of the column are much worn by the treading of feet, as Versakes observed, which would be the case if the staircase had been here. (4) The western of the two blocks at right angles to the stylobate was not intended to be visible, as is shown by the clamp-cuttings. It would serve very well as a foundation for the first step of a staircase. (5) A number of large, unworked stones situated back of the fourth intercolumniation may be explained as a part of the substructure for such a staircase. We therefore agree with Koehler and Versakes in placing a staircase here, but differ with the latter in its restoration; it was wider than he has drawn it, and it led to the square chamber, not to the second floor of the stoa.

In addition to the unworked stones above mentioned there is a series of five larger blocks of the same material (Acropolis limestone) running westward to the end of the building.<sup>1</sup> As appears on the plan, their south faces are worked, and are in a line parallel to the stylobate and distant 3.40 m. from its front edge. They are the foundation for the original retaining wall of the chamber, which is thus shown to have been square, this wall being approximately at the same distance from the centre of the pit as the west, north, and east walls of the chamber. The present retaining wall, which is on the long axis of the Stoa, is a part of the Byzantine building; it has nothing to do with the original structure. The staircase may be assumed to have occupied the whole space between the façade and the original south wall of the chamber.

The walls of the Stoa are shown in black on the plan where they now exist above the original floor levels. They are standing to a considerable height at the northeast corner. Except for a course of *orthostatai* of Hymettus marble 1.15 m. high, along the base of the rear wall, these walls are all built of

<sup>1</sup> These blocks were uncovered in the course of the excavations mentioned above, p. 32, note 1.

carefully squared blocks of *poros* tied together by  $\text{—|—}$  clamps. Along the east end of the building a water-channel running between two walls of conglomerate served to carry off the rain-water from the roof.

The stylobate is of Hymettus marble, resting on a *poros* step above a foundation course (*euthynteria*) of conglomerate. Its width is 0.83 m. Most of it is *in situ*, but the central portion has been shifted slightly out of place, doubtless as the result of an earthquake. There were three blocks to an intercolumniation,<sup>1</sup> the columns being placed over joints, not on the centres of the blocks. Various indications on the stylobate (holes for clamps where these would be hidden by the columns, rougher chiselling of the surface under the columns, circular scratched lines and weathering showing flutings) prove that the columns were of the Doric order with a lower diameter of 0.75 m. and an axial distance of 2.75 to 2.76 m. As has been stated above, the first five intercolumniations from the west end were closed by a wall. All the blocks of the stylobate were here clamped together, and their rear edges form a broken line. A scratched line running from column to column indicates that the face of the wall was on the axis of the columns. The first intercolumniation at the east end was also probably closed, though the *orthostates* now in position there dates from a rebuilding in the Roman period.

The results of the investigation thus far are shown by the restored plan, PLATE III.

### THE FAÇADE

The façade was composed of a lower and an upper Doric colonnade, each of seventeen columns between antae. Its original appearance is shown by the restored elevation, PLATE IV. As this restoration differs in many respects from that of Versakes, it will be well to give the evidence in some detail.

THE LOWER ORDER. (a) *Columns*. Two bottom drums of Hymettus marble and of excellent Greek workmanship are preserved. One of them, which is complete, is 1.18 m. high, with a lower diameter of 0.75 m. No upper drums or capitals

<sup>1</sup> There are only two blocks, one of double the normal length, in the third intercolumniation from the east end.

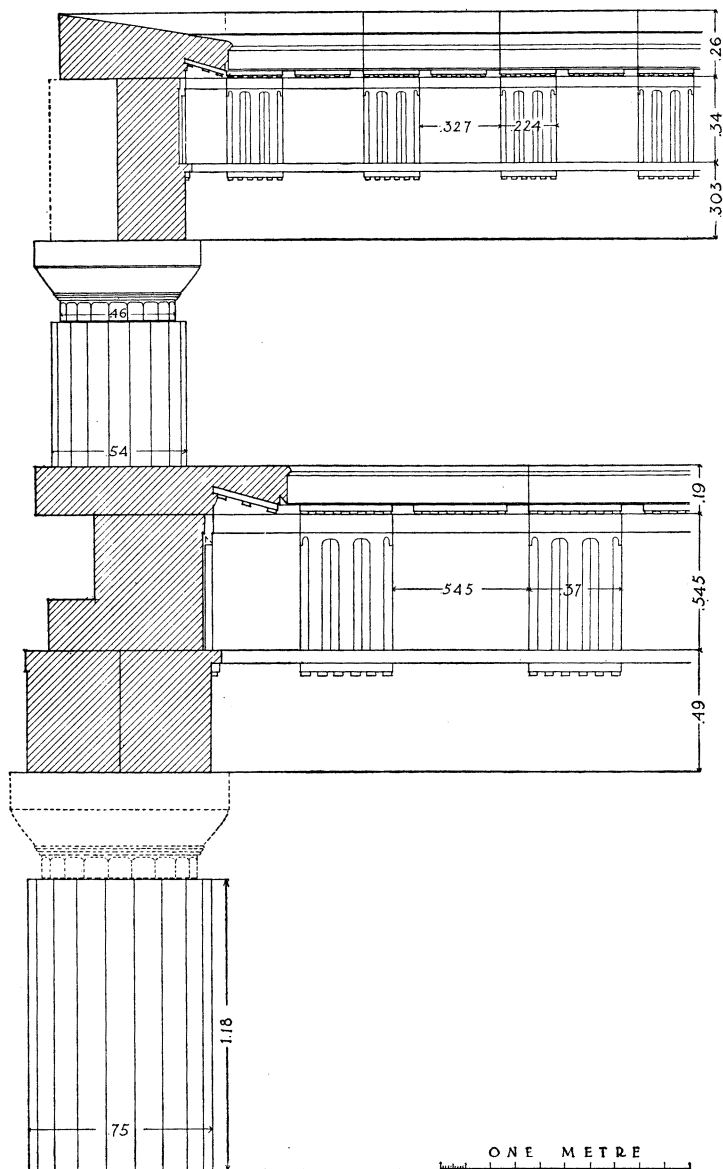


FIGURE 1. — EAST STOA OF THE ASCLEPIEUM; DETAILS OF THE ORDERS.

which could be assigned to this order were found. In the drawings the height of the column has been estimated as  $6\frac{1}{2}$  lower diameters (4.875 m.) or almost exactly fifteen Attic feet, a reasonable proportion which some facts to be mentioned below help to confirm.

(b) *Epistyle*. Three fragments of Hymettus marble were identified. On two of them the front face with taenia, regulae, and guttae is preserved. The thickness of one at the bottom is 0.38 m., of the other more than 0.60 m. The third block shows the inner face, with a simple projecting fillet (cf. Fig. 1). It is 0.37 m. wide. The epistyle was thus in part made up of two blocks set back to back, its thickness being equal to the lower diameter of the column (0.75 m.). Its height was 0.49 m. The regulae were 0.37 m. long, and the spaces between them 0.525 to 0.555 m., showing that there were three metopes to an intercolumniation.<sup>1</sup> All three fragments are of Greek workmanship.

(c) *Frieze*. Nine blocks, complete or fragmentary, were found. The dimensions are: height, 0.54 m.; width of triglyph, 0.37 m.; width of metope, 0.54 to 0.56 m. Eight blocks show two metopes and a triglyph, or two triglyphs and a metope, and are of Roman workmanship; the ninth, a corner block with a triglyph on one face and a triglyph and metope on the other, belongs to the original construction, as is shown by its superior technique and by the existence of a cutting for a  $\text{—|}$  clamp as well as for a  $\text{—}$  clamp.<sup>2</sup>

(d) *Cornice*. Nine blocks of a Doric cornice of Pentelic marble, some complete, some very fragmentary, are shown to have belonged to this order by the dimensions of the mutules and "viae." The measurements of the best preserved block are: height, 0.19 m.; length, 0.91 m.;<sup>3</sup> depth, 0.93 m. The upper surface is horizontal, not inclined as would have been the case if the building had been one story high. Most of the blocks are of excellent Greek workmanship and have clamp-cuttings of both the earlier and the later form. Their top

<sup>1</sup>  $0.37 \text{ m.} \times 3 + 0.555 \text{ m.} \times 3 = 2.775 \text{ m.}$

<sup>2</sup> This block is drawn by Versakes, *l.c.*, Fig. 5, p. 259.

<sup>3</sup> Two mutules and two "viae,"  $0.0875 \text{ m.} + 0.365 \text{ m.} + 0.0925 \text{ m.} + 0.365 \text{ m.}$  Two other blocks are 0.92 m. long.



surfaces show various other cuttings dating from the time of the Roman repairs. Roughly incised circles about 0.55 m. in diameter, with a central dowel hole and pour-channels give the positions and (approximately) the lower diameter of the upper columns. Similar incised lines show the position of the balustrade between the columns.<sup>1</sup> On one of the blocks traces of red and blue paint are still distinctly to be seen.<sup>2</sup>

(e) *Walls between columns.* On PLATE IV, the walls in the first five intercolumniations at the west end have been restored with an *orthostates* course three Attic feet high, and with eight upper courses of half this height, a system frequently employed in walls of the fifth and fourth centuries, and one which agrees with the assumed height of the columns (fifteen Attic feet). The very slight evidence in favor of this restoration is as follows: a number of *orthostatai* of Hymettus marble (some clearly of Hellenic workmanship) and of the required height, 0.99 m., are lying south of the western part of the Stoa. They vary in thickness from 0.20 to 0.26 m.; the front face is smoothed, the back is left rough. Three of them evidently do not belong to these walls, since their length (3.47, 2.97, 2.30 m.) is greater than the space between the columns. One, however, is of exactly the required length, and may have belonged to this wall.

THE UPPER ORDER. (a) *Columns.* Three complete, monolithic, Doric shafts, 2.80 to 2.85 m. long, and several fragments may confidently be assigned to this order. They are of Hymettus marble and of rather careless workmanship of the Roman period. They vary somewhat in thickness (lower diameter 0.43 to 0.54 m.; upper diameter 0.43 to 0.47 m.). A Doric capital of suitable dimensions (diameter, 0.446 m.; height, 0.325 m.) has been used in the restoration.

(b) *Epistyle-frieze.* Two fragmentary blocks of Hymettus

<sup>1</sup> Two of the blocks are drawn by Versakes, *l.c.*, Figs. 6, 7. His statement (p. 263) that the diameter of these circles, which he gives as 0.49 m., "clearly corresponds to the upper diameter of the column" is puzzling, as is his restoration on these circles of Ionic bases of much larger diameter.

<sup>2</sup> Red: the "viae," the vertical band above the mutules, the cymatium, the narrow strip of the soffit which shows between the triglyphs. Blue: the mutules, the vertical band below the cymatium. Cf. Koehler, *l.c.*, p. 231, note 1, who observed also remains of a painted pattern (thunderbolt or palmette) on the "viae."

marble and of Roman date are at present lying in the Stoa near its east end. One of them is shown in Figure 2. Be-

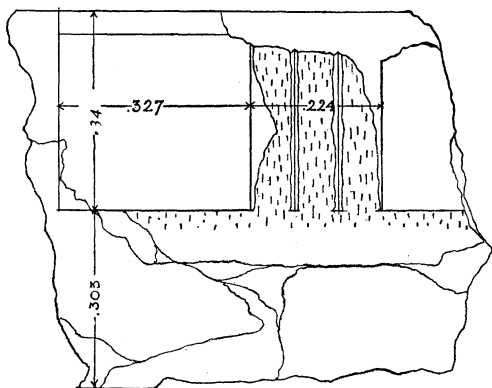


FIGURE 2. — EPISTYLE-FRIEZE BLOCK.

cause of their small height the epistyle and triglyphon were made in one block 0.643 m. high. On the existing fragments the projections of the triglyphs, regulae, etc., have been roughly chiselled off, the blocks evidently having served as material for a late wall.

But enough of their faces remains to establish the chief dimensions as given in Figure 2. The widths of the triglyphs and metopes fit the axial distance, assuming that there were five metopes to an intercolumniation.<sup>1</sup>

(c) *Cornice*. One block, of workmanship of the Roman period and, like the lower cornice, of Pentelic marble, is identified by the widths of the mutule and "via" (0.232, 0.045 m.) which agree with the details of the frieze and the axial distance.<sup>2</sup> The top surface is inclined to suit the slope of the roof.<sup>3</sup>

THE ROOF. In the drawings, PLATES IV, V, this has been restored as a pent roof with a hip at each end, the most suitable arrangement for a stoa set against a wall of rock, and one which solves satisfactorily the problem of including the square chamber at the west end.<sup>4</sup> This is made clear by the accompanying diagram, Figure 3. A bit of evidence in favor

<sup>1</sup>  $0.224 \text{ m.} \times 5 + 0.327 \text{ m.} \times 5 = 2.755 \text{ m.}$

<sup>2</sup>  $0.045 \text{ m.} \times 10 + 0.232 \times 10 = 2.77 \text{ m.}$

<sup>3</sup> This block is drawn by Versakes, *l.c.*, Fig. 13, and used in his restoration of the temple, to which he also assigns the columns and epistyle-frieze above described. On the resulting temple façade, see Dörpfeld, *l.c.*, p. 70.

<sup>4</sup> Versakes' restoration of a roof with two slopes is open to the objection that the rain water which would collect at the junction of the roof with the face of the cliff would be difficult to carry off.

of this restoration seems hitherto to have escaped notice. If the sloping line given by the top surface of the upper cornice be prolonged, it strikes the face of the cliff at a point about 13 m. above the level of the stylobate. At this level a roughly worked groove is clearly to be seen running horizontally for a distance of about 2 m. (see Fig. 4). Probably the top row of roof tiles once fitted into it. Its position helps also to con-

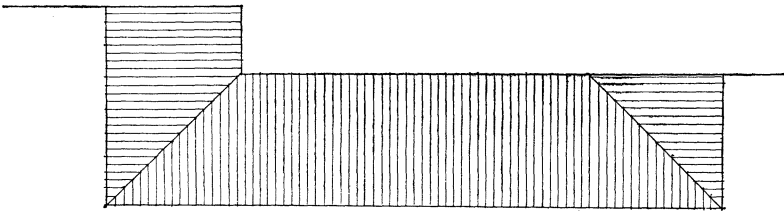


FIGURE 3.—PLAN OF ROOF OF EAST STOA.

firm the restoration of the façade, especially the height of the lower columns, — the only dimension which cannot be measured.

In the drawings, PLATES III–V and Figure 1, certain details are shown for which no evidence from the remains can be adduced. These are the details of the upper triglyphon (taken from those of the lower order), the sima and the roof-tiles, the balustrade between the upper columns, the interior columns, the capitals of the antae, the timbers which supported the upper floor and the roof, the steps of both staircases, and the bench running along the base of the rear wall. The floor was, as usual in stoa, of pounded earth.<sup>1</sup> The five intercolumniations of the upper colonnade at the west end have been shown open as a means of lighting the square chamber. It is possible that they were closed, and that the chamber was lighted by an opening in the roof above the pit. The northern half of the upper story has been indicated as shut off by a wall and divided into rooms, on the analogy of the later West Stoa, which

<sup>1</sup> Koehler, *l.c.*, p. 232, supposed that the floor was of slabs of Hymettus marble. But the evidence he gives is not convincing. The block of Hymettus marble just in front of the west staircase is explained by the existence of the staircase, and the cuttings along the inner edge of the stylobate are not as carefully made as would have been the case if they were to support marble slabs. There was a line of Hymettus slabs along the base of the rear wall where we have restored a bench. Cf. PLATES II and III.

had four rooms at the back. The foundation wall running back from the fifth column has been used to restore a small chamber, though it is possible that this space contained another staircase giving a second means of access to the upper story.

The architectural forms, the fine workmanship of such portions as go back to the original construction, and the use

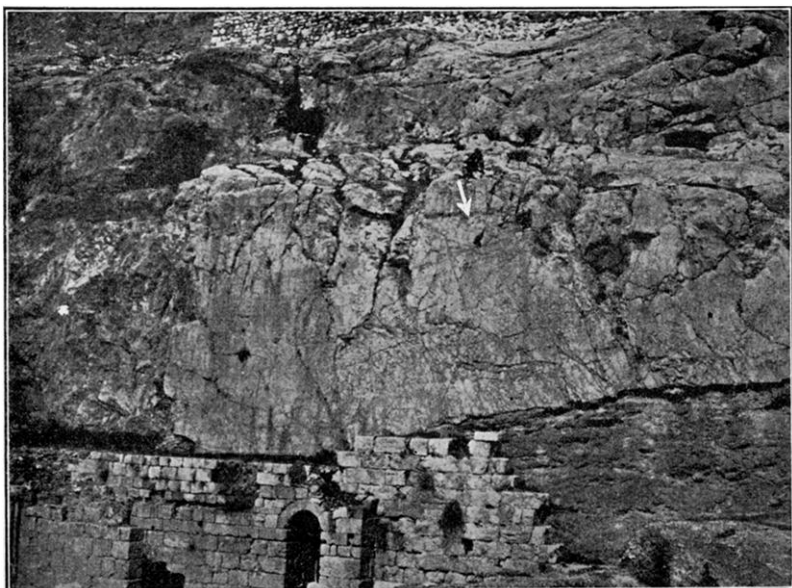
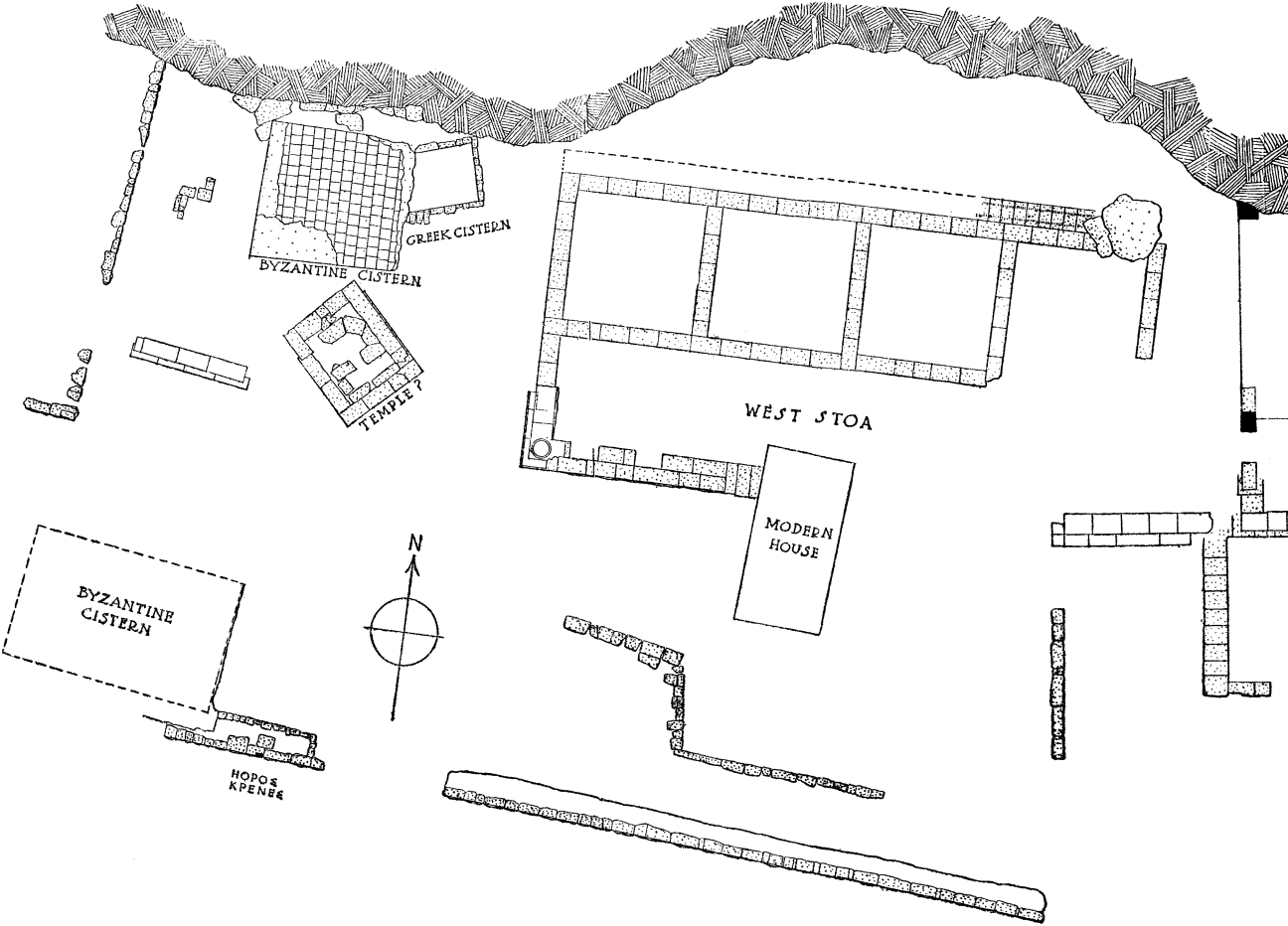


FIGURE 4. — FACE OF ROCK, SHOWING CUTTING.

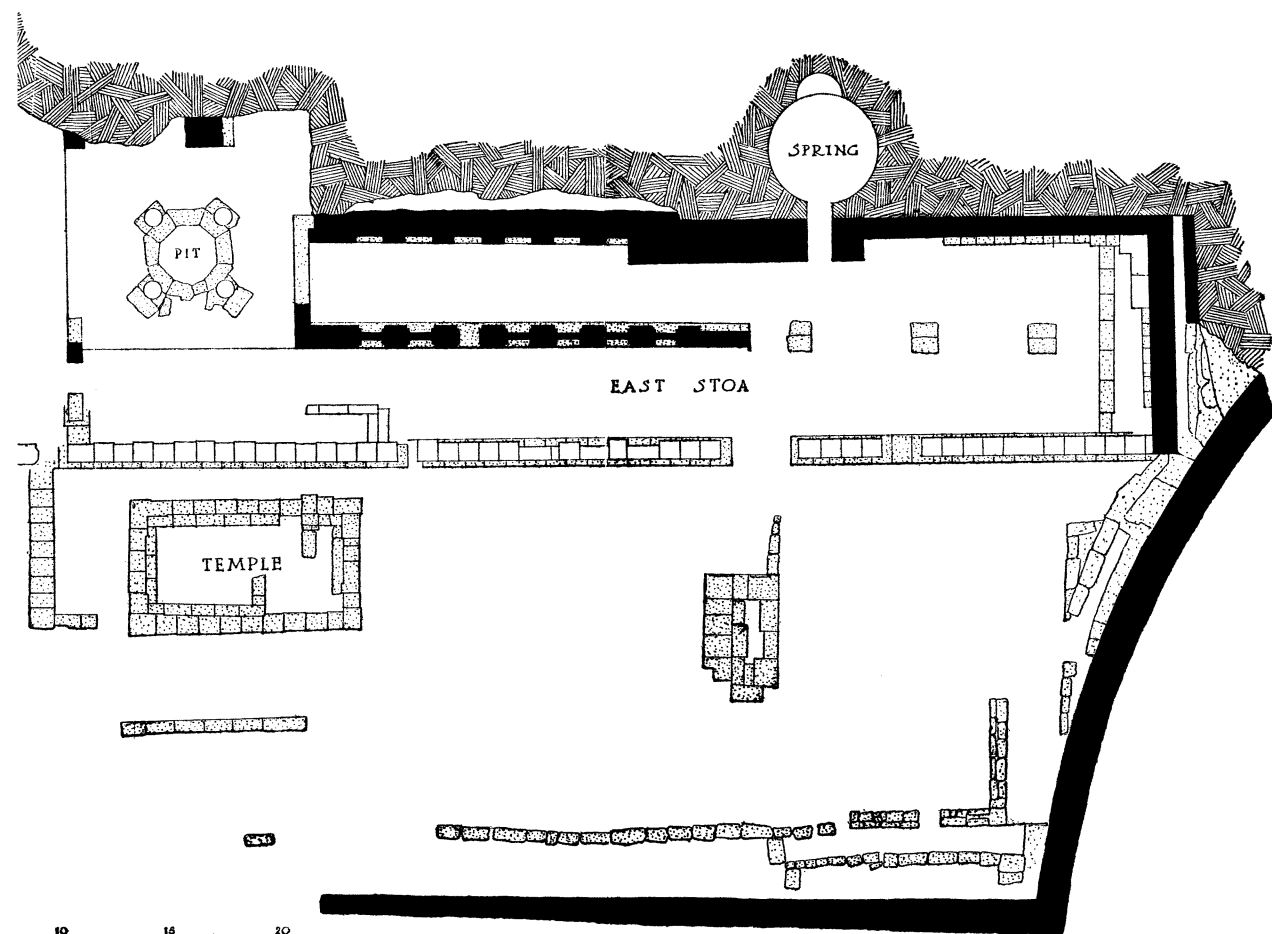
of  $\perp$  clamps make it clear that the Stoa is not to be dated later than the fourth century B.C., while the abundant use of Hymettus marble forbids assigning it to the fifth century. It may well be contemporaneous with the Dionysiac theatre, built during the administration of Lyscurgus.<sup>1</sup> The circular pit and the *tholos*, or cave from which the spring emerges, may both be earlier structures incorporated in it, though there is no conclusive evidence to support this view. The building was

<sup>1</sup>This date is proposed by Judeich. Versakes holds that because the east wall was not intended to be visible the Stoa was built after, rather than before, the theatre. But this argument is not conclusive; even before the theatre was built the higher ground level to the east would have hidden the lower courses of this wall from view.



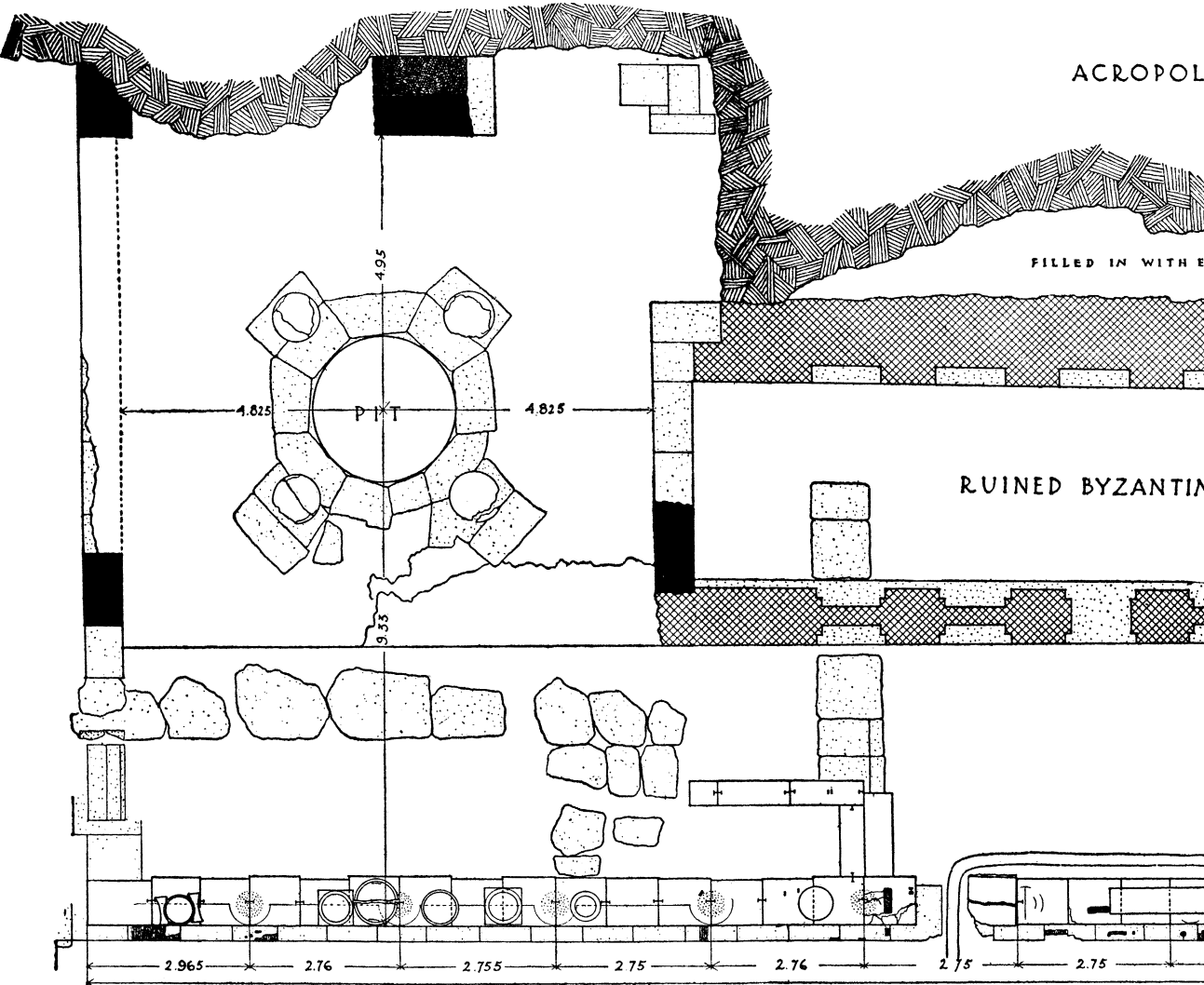
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SCALE IN METERS

PLAN OF THE ASCLEPIEION



10 15 20  
IN METRES

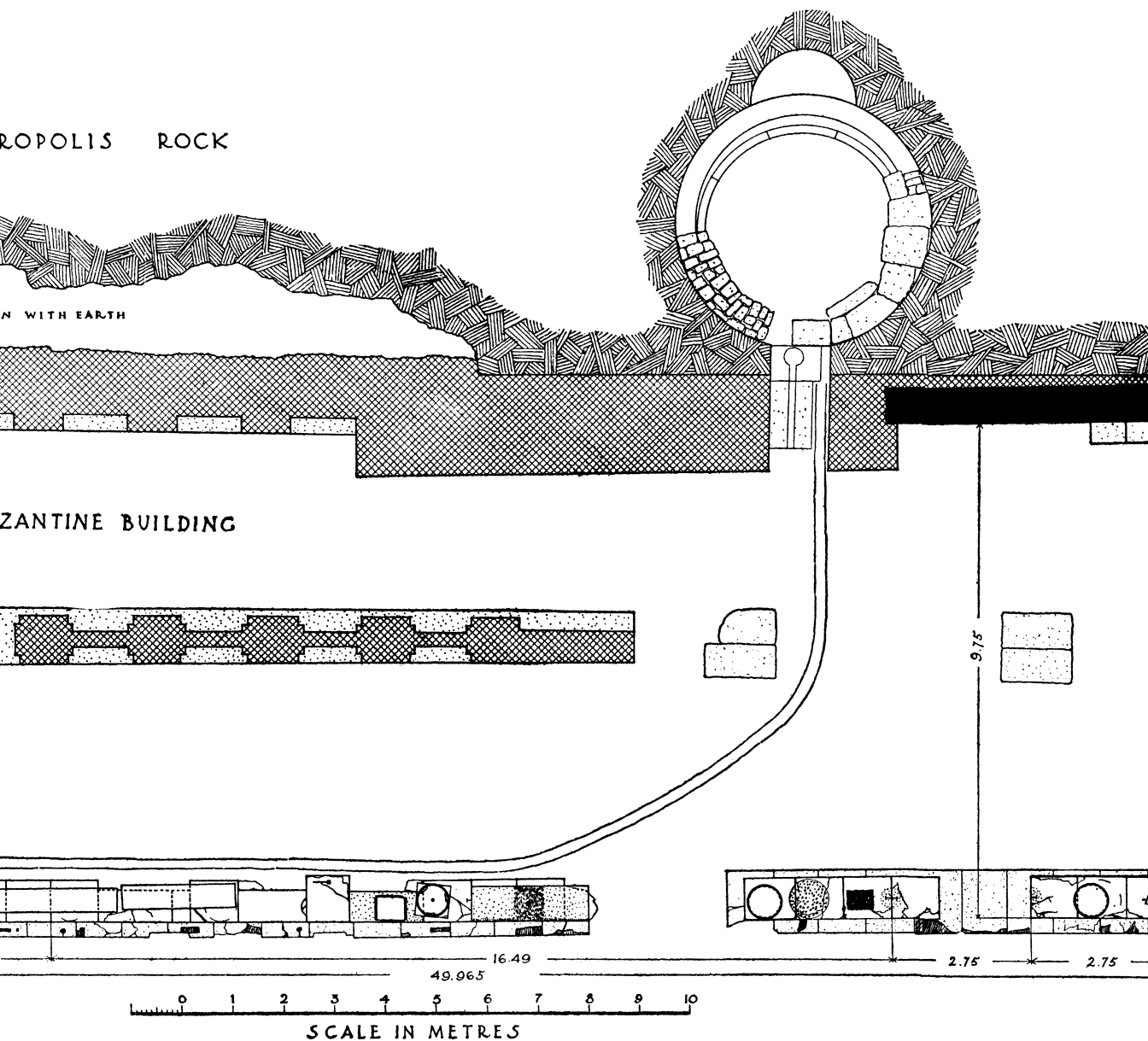
SCLEPIEUM AT ATHENS



ACROPOLIS ROCK

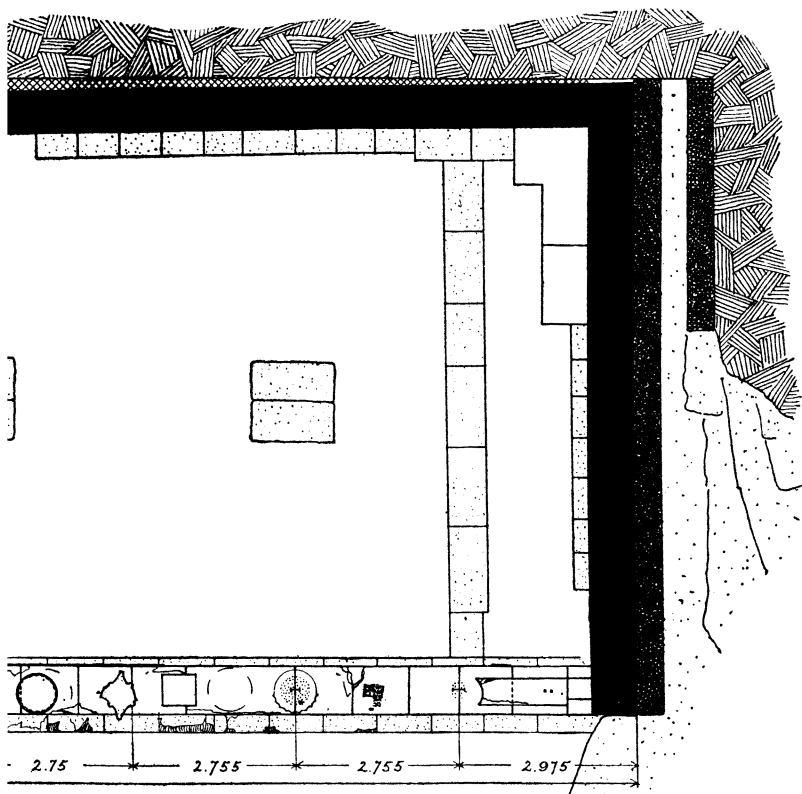
AREA WITH EARTH

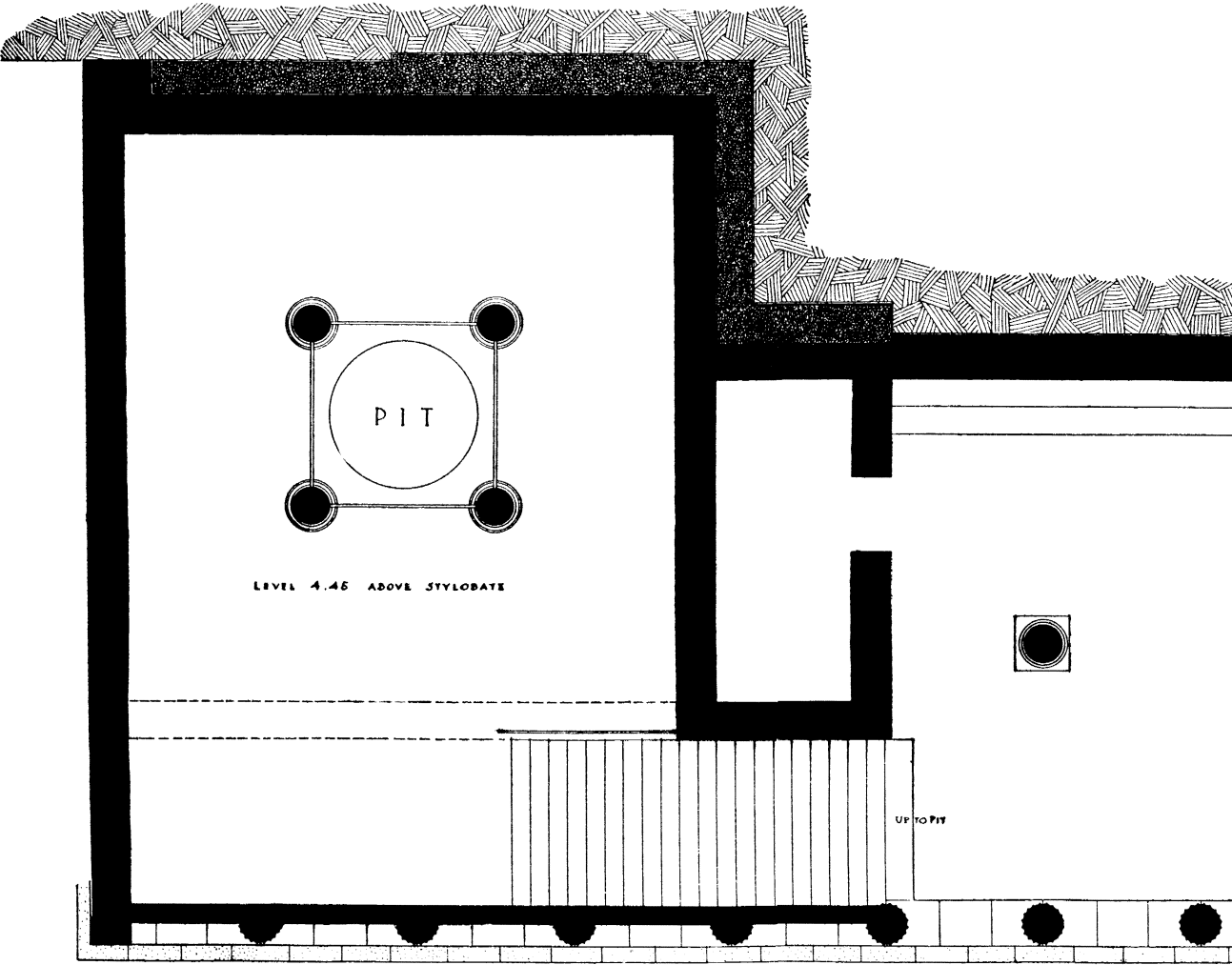
BYZANTINE BUILDING



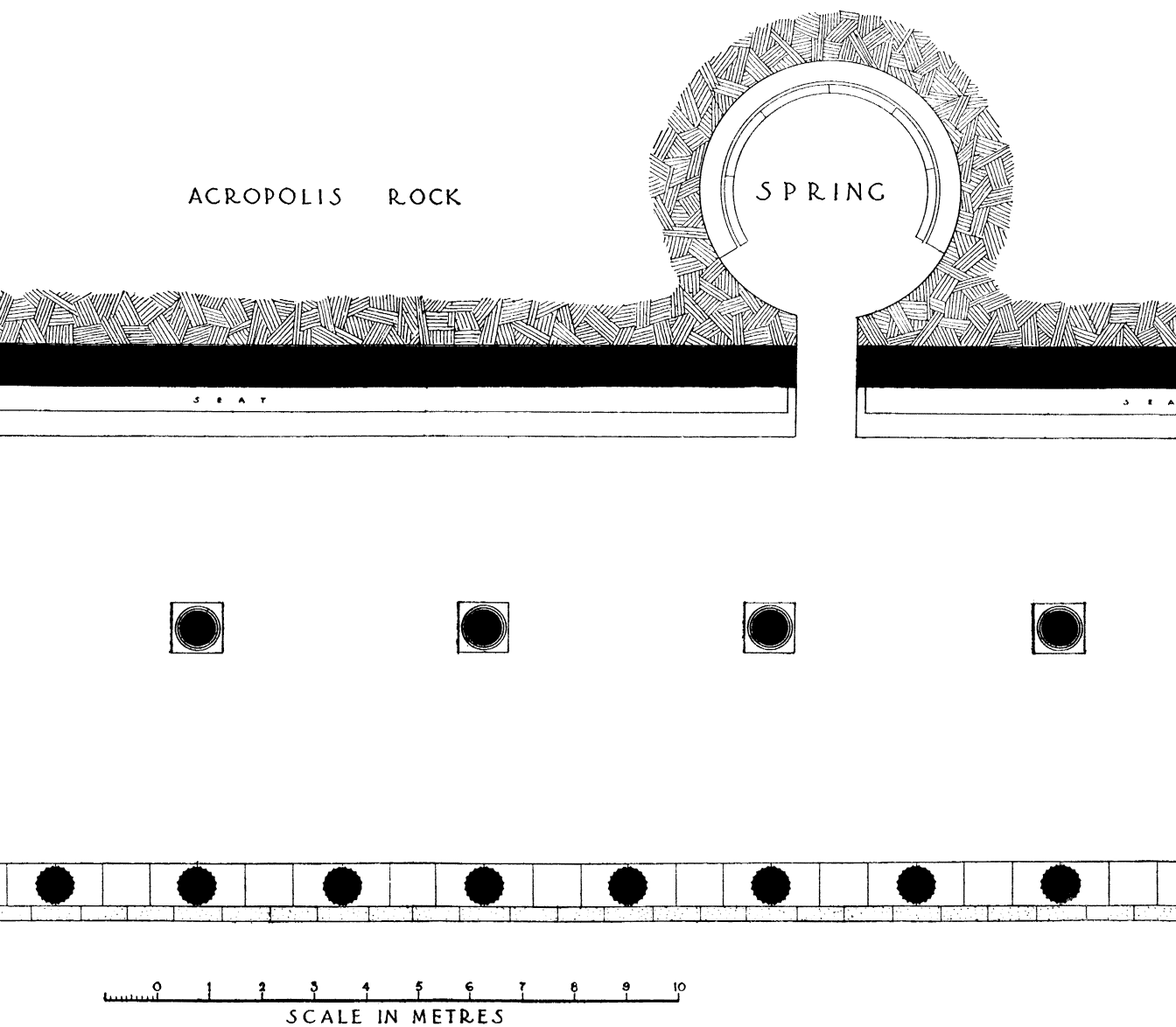
PLAN OF THE EAST STOA IN THE ASCLEPIEUM AT ATHENS; PRESENT STATE





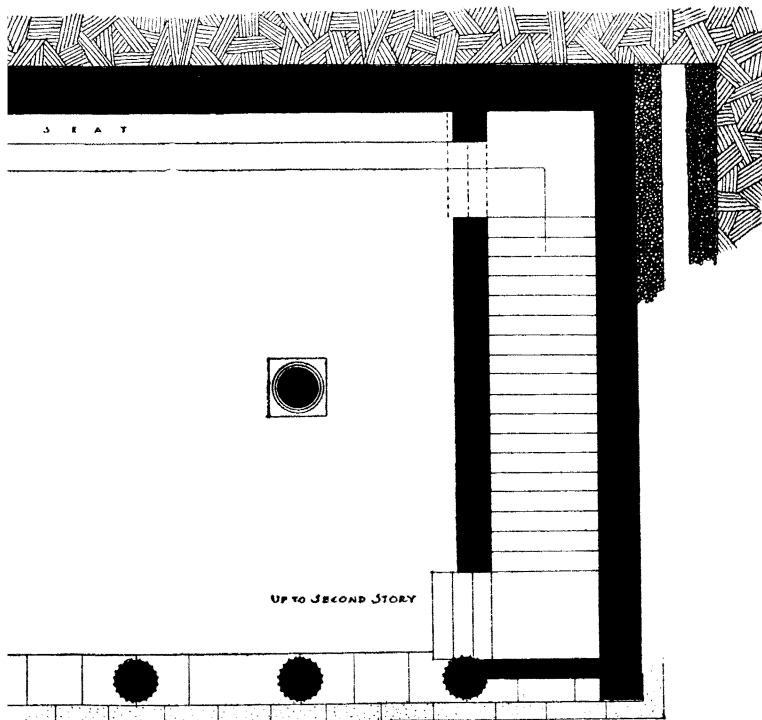


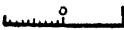
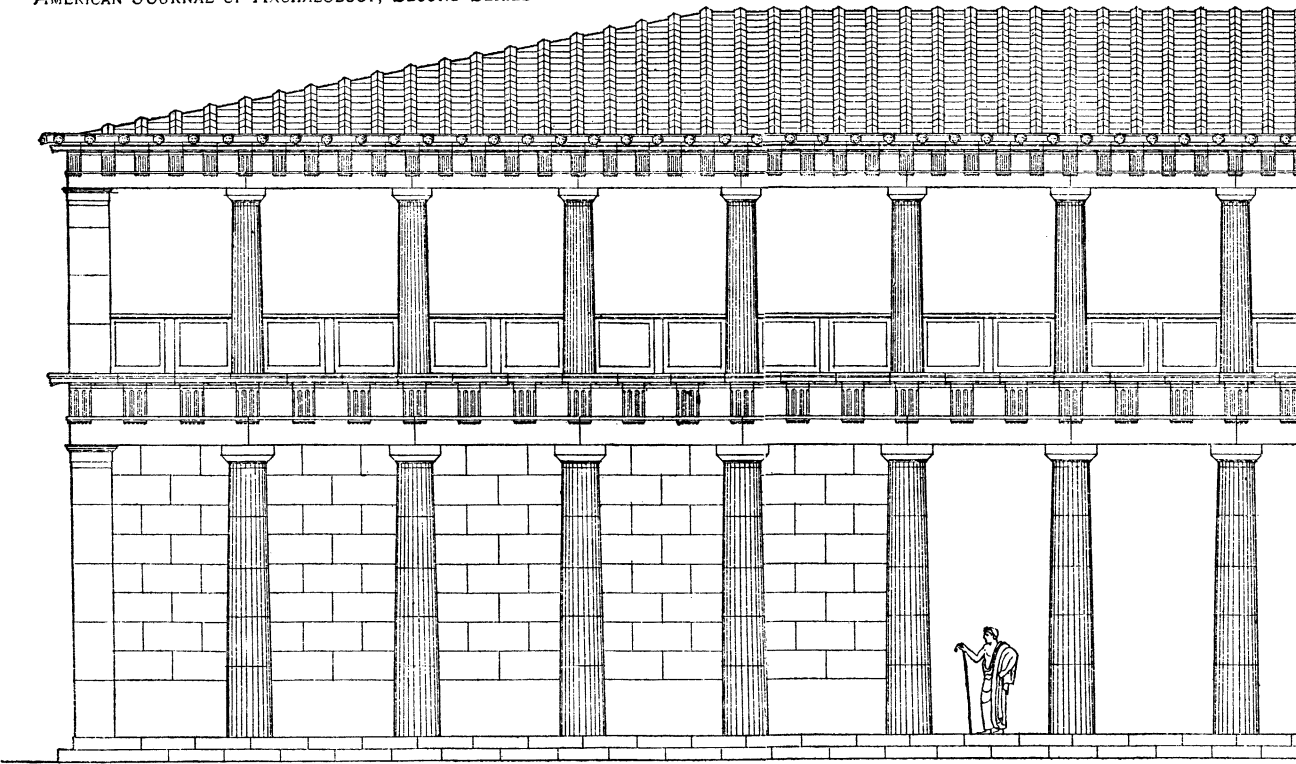
THE EAST



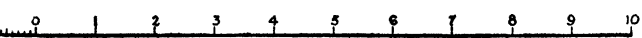
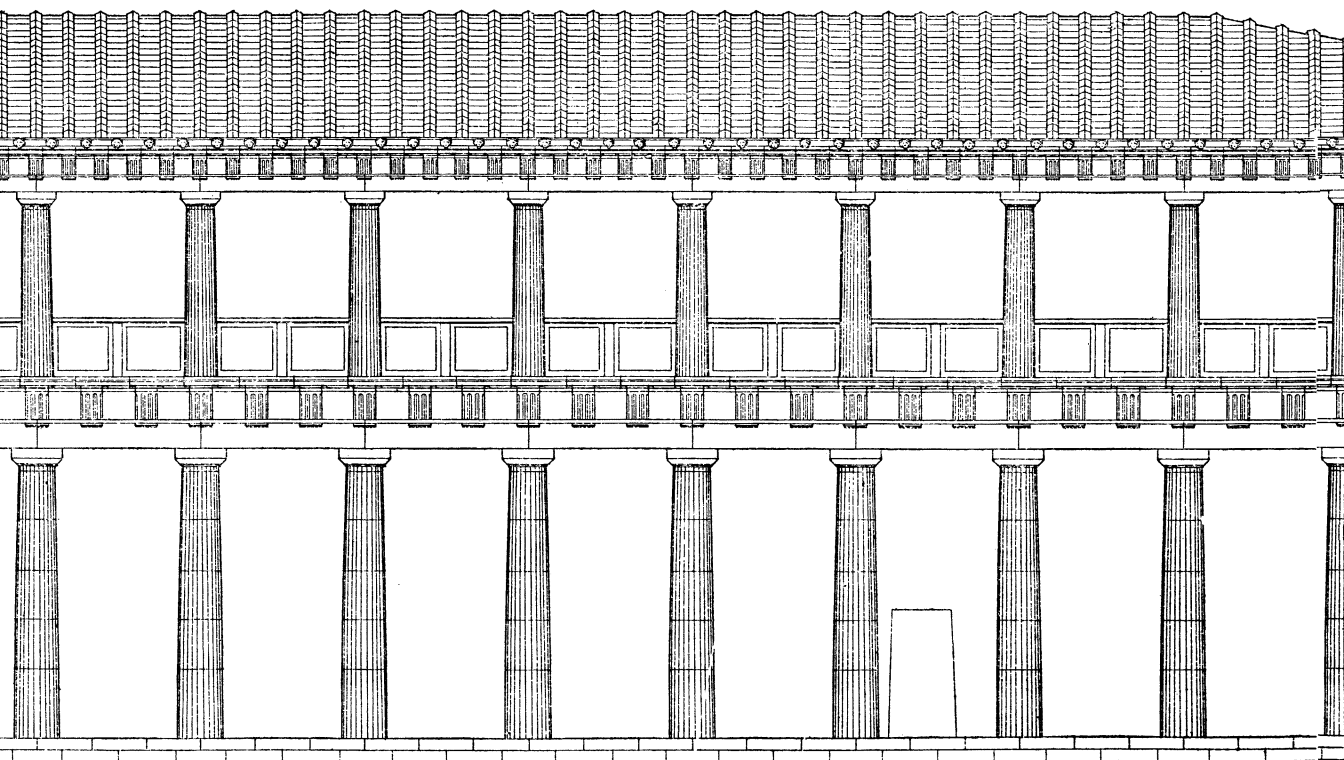
THE EAST STOA IN THE ASCLEPIEUM AT ATHENS; RESTORED PLAN

ACROPOLIS ROCK



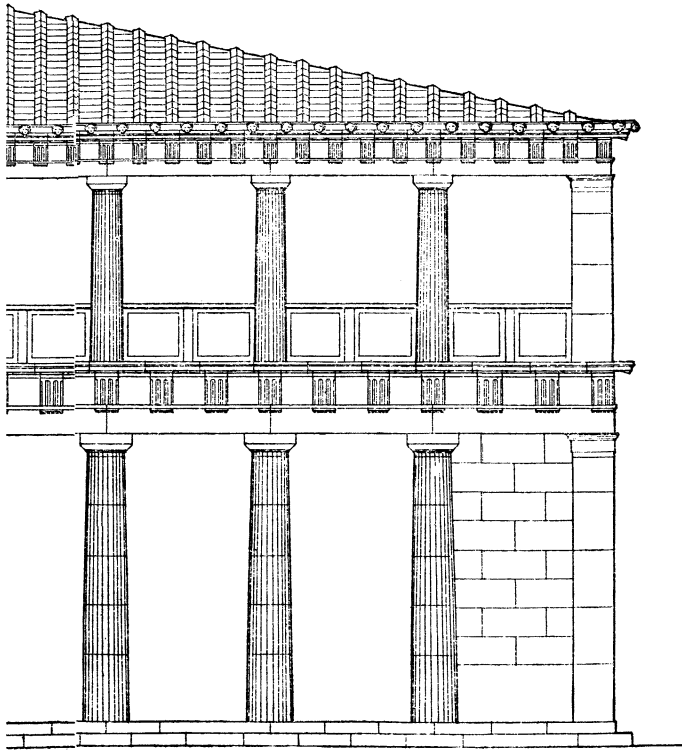


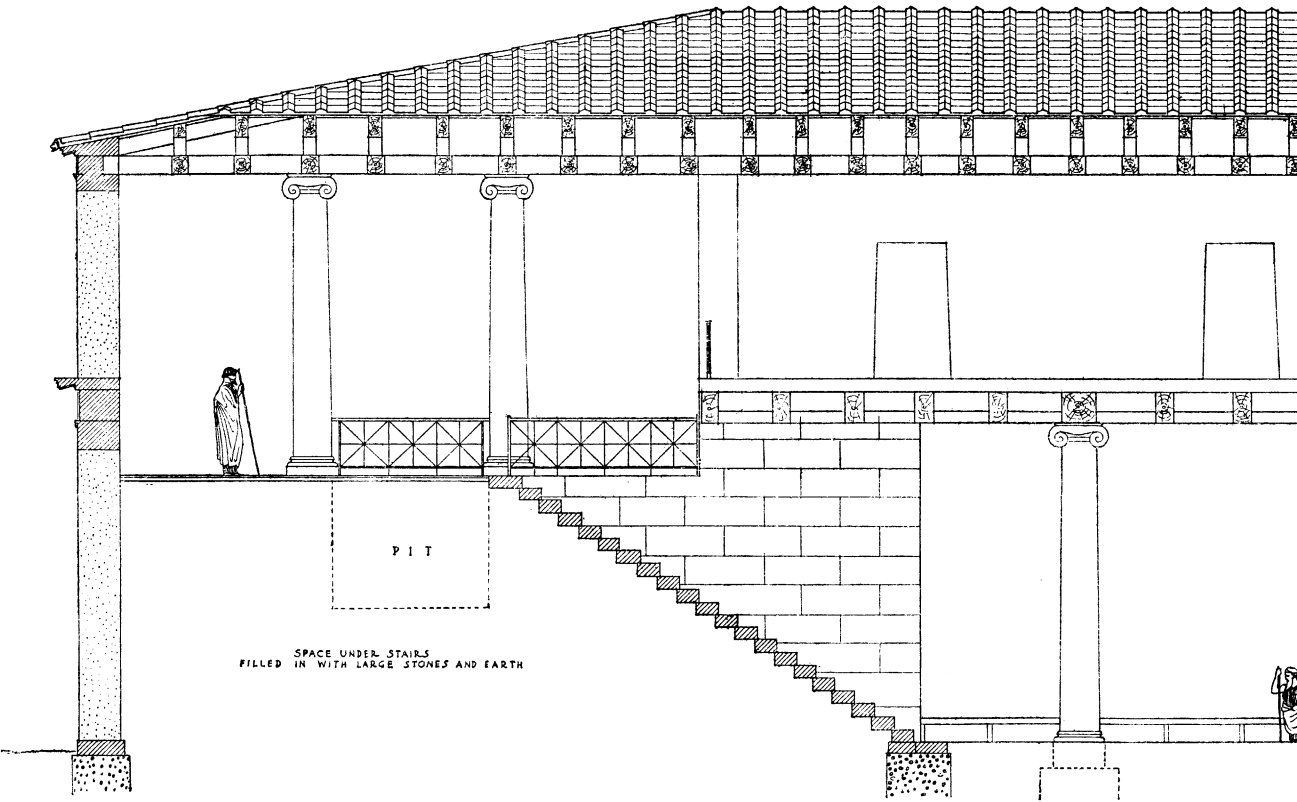
THE EAST STOA IN



SCALE IN METRES

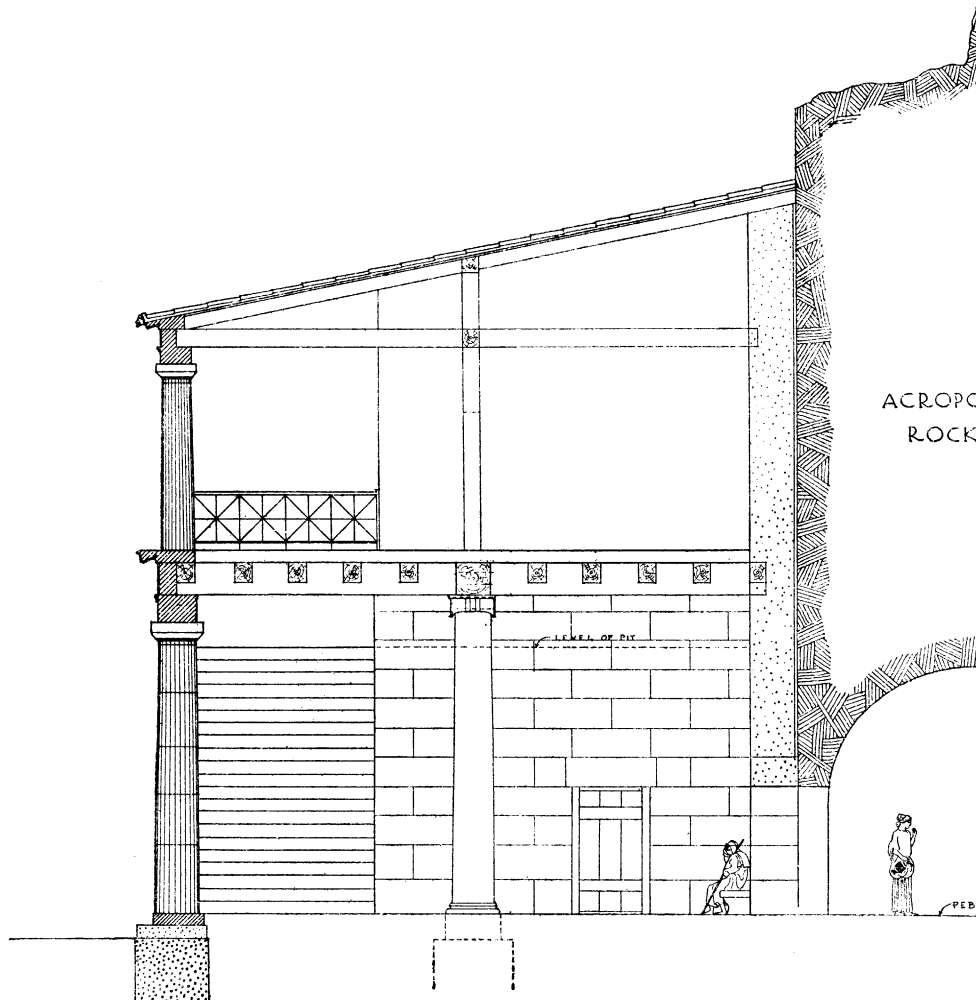
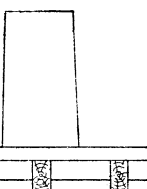
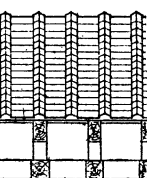
STOA IN THE ASCLEPIEUM AT ATHENS; RESTORED ELEVATION





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.SCALE  
THE EAST STOA IN THE





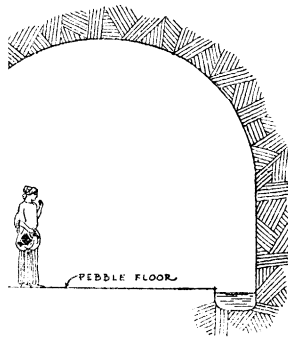
2 3 4 5 6 7 8 9 10  
SCALE IN METRES

IN THE ASCLEPIEUM AT ATHENS; SECTIONS

VOL. XV (1911) PLATE V



ACROPOLIS  
ROCK



seriously injured and rebuilt, or extensively repaired, in Roman times, in accordance with the original design. The evidence of more careless repairs in still later times need not be described here.

The Stoa was the largest and most important building in the Sanctuary. Its colonnade, open to the south and protected by the Acropolis from the north winds, formed an agreeable resort for the votaries of the god. In it was the spring whose medicinal qualities aided in the cures. Some important ceremony of the cult was doubtless performed in the square chamber at the west end; the circular well may have been the abode of the sacred serpents, though it seems more likely that it was used as a sacrificial pit. The upper story was probably devoted to the rite of incubation; here Asclepius appeared to his suppliants in their sleep and performed miraculous cures such as those recorded in the Epidaurian inscriptions.

GORDON ALLEN.

L. D. CASKEY.

BOSTON.